

REMARKS**I. General**

Claims 1-47 were pending in the present application, and all of the pending claims are rejected in the current Office Action (mailed May 3, 2005). The outstanding issues raised in the current Office Action are:

- Claims 1-47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,905,906 issued to Goffinet et al. (hereinafter "*Goffinet*") in view of U.S. Patent No. 5,386,512 issued to Crisman et al. (hereinafter "*Crisman*").

In response, Applicant respectfully traverses the outstanding claim rejections, and requests reconsideration and withdrawal thereof in light of the remarks presented herein.

II. Rejections Under 35 U.S.C. § 103 over *Goffinet* in view of *Crisman*

To establish a prima facie case of obviousness, three basic criteria must be met. *See* M.P.E.P. § 2143. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the applied references must teach or suggest all the claim limitations. Without conceding the second criteria, Applicant respectfully asserts that the rejection does not satisfy the first and third criteria.

A. The Applied Combination Fails to Teach or Suggest All Claim Elements**Independent claim 1**

Independent claim 1 recites in part:

aggregate context information specifying operational parameters available via said communication network, wherein said aggregate context information is communicatively accessible by said server; and

at least one device communicatively coupled to said communication network, wherein said at least one device includes operational specification information specifying individual operational parameters of said at least one device stored locally to said at least one device, and wherein said at least one device further includes relational context information stored locally thereto

specifying the relation of said individual operational parameters of said at least one device to said aggregate of operational parameters available via said communication network. (Emphasis added).

The applied combination of *Goffinet* and *Crisman* fails to teach or suggest the above elements of claim 1. The current Office Action concedes that *Goffinet* fails to teach or suggest at least one device that includes “relational context information stored locally thereto specifying the relation of said individual operational parameters of said at least one device to said aggregate of operational parameters”, *see* page 3 of the Office Action. However, the Office Action asserts that *Crisman* teaches this element of claim 1. The Office Action concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of *Goffinet* to include relational context information in the manner asserted as taught by *Crisman*. *See* Page 3 of the Office Action.

However, *Crisman* fails to teach or suggest a device that includes relational context information stored locally thereto specifying the relation of the individual operational parameters of the device to an aggregate of operational parameters available via a communication network. Instead, *Crisman* teaches a system in which a Service Call Logical Processor (SCLP) and control program (CP) can communicate their respective functional capabilities to each other. Thus, for instance, if a function of a SCLP becomes unavailable (either temporarily or permanently), the SCLP can notify the CP of this change in its functional capability. Thus, the CP can be made aware of the functional capability of the SCLP. However, *Crisman* does not teach or suggest that a device (e.g., either the SCLP or CP) has relational context information stored locally thereto specifying the relation of the device’s individual operational parameters to an aggregate of operational parameters available via a communication network. For instance, *Crisman* does not teach or suggest that the SCLP stores relational context information specifying a relation of its individual operational parameters to an aggregate of operational parameters available via a communication network. For example, the *Crisman* does not teach or suggest that the SCLP stores relational context information specifying a relation of its individual operational parameters to an aggregate of operational parameters available from other SCLP’s present in the system. Instead, the SCLP informs the CP of the SCLP’s functional capability, and the CP may use this information in determining what functions to request from SCLP. As discussed further below, *Crisman* addresses how one device (e.g., SCLP) can inform another

device (e.g., CP) of changes in its functional capabilities, and does not teach or suggest a device storing information (e.g., relational context information) that specifies how the device's individual operational parameters measure up to an aggregate of operational parameters available via a communication network.

Crisman explains that "In the past, the method for interactive communication from the CP to the SCLP was often inefficient in getting the SCLP to process operating system requests in a timely manner." Col. 3, lines 10-13 of *Crisman*. *Crisman* thus provides that "This invention describes a methodology whereby the SCLP and CP can notify each other of their initial processing capability and subsequently DYNAMICALLY notify each other whenever there is either an increase or a reduction in that capability." Col. 7, lines 12-16 of *Crisman*. *Crisman* further explains its system as follows:

A dynamic capability exchange mechanism for two processing entities (in particular, a CP and an SCLP):

1. To pass and solicit information from the other, and to notify each other of their initial capability to handle the other's request to process an SCLP event.
2. To subsequently and dynamically notify each other whenever there is an increase/reduction in their processing capability.
3. To determine what events can be handled by the other, and to send just those requests that the other can handle.

As a result of using this mechanism:

1. A sender knows before hand for any required function, whether the receiver can perform that function. Both the SCLP and the CP can dynamically acquire and lose processing capability during the operation of the system and can quickly notify the other about the change in operative state.

Since the sender knows ahead of time that a given request cannot be performed, that request is not made. Col. 4, lines 39-60 of *Crisman*.

While *Crisman* teaches that the SCLP and CP can notify each other of their respective functional capabilities, it fails to teach or suggest that either device has relational context information stored locally thereto specifying the relation of its individual operational parameters to an aggregate of operational parameters available via a communication network. Instead, *Crisman* merely provides a technique for one device (SCLP) to notify another device (CP) of its functional capabilities. For instance, while the SCLP is aware of its individual functional capabilities and is capable of informing the CP of those capabilities in *Crisman*, the SCLP does not have relational context information specifying the relation of its functional

capabilities to an aggregate of functional capabilities available (e.g., via other SCLPs) via a communication network.

In view of the above, the combination of *Goffinet* and *Crisman* fails to teach or suggest all elements of claim 1, and therefore the rejection of claim 1 should be withdrawn.

Independent Claim 14

Independent claim 14 recites in part:

A device communicatively connectable to a communication network,
said device comprising:

...

means for receiving aggregate context information specifying an
aggregate of operational parameters available via said communication
network; and

means for mapping at least a portion of said operational specification
information onto the received aggregate context information to generate
relational context information specifying the relation of said individual
operational parameters of said device to said aggregate of operational
parameters available via said communication network. (Emphasis added).

The applied combination of *Goffinet* and *Crisman* fails to teach or suggest the above elements of claim 14. The current Office Action concedes that *Goffinet* fails to teach or suggest the recited “means for mapping” of claim 14, *see* page 4 of the Office Action. However, the Office Action asserts that *Crisman* teaches this element of claim 14, and thus concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of *Goffinet* to include the means for mapping in the manner asserted as taught by *Crisman*. *See* page 4 of the Office Action.

However, *Crisman* fails to teach or suggest a device that comprises a “means for mapping at least a portion of said operational specification information onto the received aggregate context information to generate relational context information specifying the relation of said individual operational parameters of said device to said aggregate of operational parameters available via said communication network” as recited by claim 14. Instead, as discussed in detail above with claim 1, *Crisman* teaches a system in which a SCLP and CP can communicate their respective functional capabilities to each other. Thus, for instance, if a function of a SCLP becomes unavailable (either temporarily or permanently),

the SCLP can notify the CP of this change in its functional capability. Thus, the CP can be made aware of the functional capability of the SCLP. However, *Crisman* does not teach or suggest that a device (e.g., either the SCLP or CP) has means for mapping at least a portion of the device's operational specification information onto received aggregate context information to generate relational context information. As discussed further above with claim 1, *Crisman* addresses how one device (e.g., SCLP) can inform another device (e.g., CP) of changes in its functional capabilities, and does not teach or suggest a device mapping the device's operational specification information onto received aggregate context information to generate relational context information that specifies how the device's individual operational parameters measure up to an aggregate of operational parameters available via a communication network.

In view of the above, the combination of *Goffinet* and *Crisman* fails to teach or suggest all elements of claim 14, and therefore the rejection of claim 14 should be withdrawn.

Independent Claim 20

Independent claim 20 recites in part:

A method for providing relational context intelligence to a network device, said method comprising the steps of:

...
communicating at least a portion of said aggregate context information to said first network device;

said first network device generating relational context information specifying a relation of said first network device's operational parameters to operational parameters of other network devices communicatively coupled to said communication network; and

storing said relational context local to said first network device.
(Emphasis added).

The applied combination of *Goffinet* and *Crisman* fails to teach or suggest the above elements of claim 20. The current Office Action concedes that *Goffinet* fails to teach or suggest a first network device "generating relational context information specifying a relation of said first network device's operational parameters to operational parameters of other network devices communicatively coupled to said communication network" as recited by claim 20, *see* page 5 of the Office Action. However, the Office Action asserts that *Crisman* teaches this element of claim 20, and thus concludes that it would have been obvious to one

of ordinary skill in the art at the time the invention was made to modify the method of *Goffinet* to include this generating in the manner asserted as taught by *Crisman*. See pages 5-6 of the Office Action.

However, *Crisman* fails to teach or suggest a network device that generates relational context information specifying a relation of the device's operational parameters to operational parameters of other network devices communicatively coupled to a communication network as recited by claim 20. Instead, as discussed in detail above with claim 1, *Crisman* teaches a system in which a SCLP and CP can communicate their respective functional capabilities to each other. Thus, for instance, if a function of a SCLP becomes unavailable (either temporarily or permanently), the SCLP can notify the CP of this change in its functional capability. Thus, the CP can be made aware of the functional capability of the SCLP. However, *Crisman* does not teach or suggest that a device (e.g., either the SCLP or CP) generates relational context information specifying a relation of the device's operational parameters to operational parameters of other network devices communicatively coupled to a communication network. As discussed further above with claim 1, *Crisman* addresses how one device (e.g., SCLP) can inform another device (e.g., CP) of changes in its functional capabilities, and does not teach or suggest a device generating relational context information as recited by claim 20.

In view of the above, the combination of *Goffinet* and *Crisman* fails to teach or suggest all elements of claim 20, and therefore the rejection of claim 20 should be withdrawn.

Independent Claim 31

Independent claim 31 recites in part:

A device communicatively connectable to a communication network,
said device comprising:

...

wherein said device is configured to receive aggregate context information specifying an aggregate of operational parameters available via said communication network; and

wherein said device is configured to map at least a portion of said operational specification information onto the received aggregate context information to generate relational context information specifying the relation of said individual operational parameters of said device to said aggregate of

operational parameters available via said communication network. (Emphasis added).

The applied combination of *Goffinet* and *Crisman* fails to teach or suggest the above elements of claim 31. The current Office Action concedes that *Goffinet* fails to teach or suggest a device that “is configured to map at least a portion of said operational specification information onto the received aggregate context information to generate relational context information specifying the relation of said individual operational parameters of said device to said aggregate of operational parameters available via said communication network” as recited by claim 31, *see* page 4 of the Office Action. However, the Office Action asserts that *Crisman* teaches this element of claim 31, and thus concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of *Goffinet* to have a device configured in the manner asserted as taught by *Crisman*. *See* page 4 of the Office Action.

However, *Crisman* fails to teach or suggest a device that is configured to map at least a portion of its operational specification information onto received aggregate context information to generate relational context information specifying the relation of its individual operational parameters to the aggregate of operational parameters available via a communication network, as recited by claim 31. Instead, as discussed in detail above with claim 1, *Crisman* teaches a system in which a SCLP and CP can communicate their respective functional capabilities to each other. Thus, for instance, if a function of a SCLP becomes unavailable (either temporarily or permanently), the SCLP can notify the CP of this change in its functional capability. Thus, the CP can be made aware of the functional capability of the SCLP. However, *Crisman* does not teach or suggest that a device (e.g., either the SCLP or CP) maps at least a portion of its operational specification information onto received aggregate context information to generate relational context information as recited by claim 31. As discussed further above with claim 1, *Crisman* addresses how one device (e.g., SCLP) can inform another device (e.g., CP) of changes in its functional capabilities, and does not teach or suggest a device mapping any portion of its operational specification information onto received aggregate context information to generate relational context information.

In view of the above, the combination of *Goffinet* and *Crisman* fails to teach or suggest all elements of claim 31, and therefore the rejection of claim 31 should be withdrawn.

Independent Claim 37

Independent claim 37 recites:

A computer program product for providing relational context intelligence to a device communicatively connectable to a communication network, said computer program product comprising a computer-readable storage medium having computer-readable program code embodied in said medium, said computer readable program code comprising:

code executable to receive aggregate context information specifying an aggregate of operational parameters available via said communication network; and

code executable to map at least a portion of operational specification information for said device onto the received aggregate context information to generate relational context information, wherein said operational specification information includes information specifying individual operational parameters of said device and wherein said relational context information includes information specifying the relation of said individual operational parameters of said device to said aggregate of operational parameters available via said communication network. (Emphasis added).

The applied combination of *Goffinet* and *Crisman* fails to teach or suggest the above elements of claim 37. The current Office Action concedes that *Goffinet* fails to teach or suggest “code executable to map at least a portion of operational specification information for said device onto the received aggregate context information to generate relational context information, ... wherein said relational context information includes information specifying the relation of said individual operational parameters of said device to said aggregate of operational parameters available via said communication network” as recited by claim 37, *see* page 4 of the Office Action. However, the Office Action asserts that *Crisman* teaches this element of claim 37, and thus concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of *Goffinet* to include the recited code executable to map at least a portion of operational specification information for a device onto the received aggregate context information to generate relational context information in the manner asserted as taught by *Crisman*. *See* page 4 of the Office Action.

However, *Crisman* fails to teach or suggest “code executable to map at least a portion of operational specification information for said device onto the received aggregate context information to generate relational context information, ... wherein said relational context information includes information specifying the relation of said individual operational parameters of said device to said aggregate of operational parameters available via said communication network”, as recited by claim 37. Instead, as discussed in detail above with claim 1, *Crisman* teaches a system in which a SCLP and CP can communicate their respective functional capabilities to each other. Thus, for instance, if a function of a SCLP becomes unavailable (either temporarily or permanently), the SCLP can notify the CP of this change in its functional capability. Thus, the CP can be made aware of the functional capability of the SCLP. However, *Crisman* does not teach or suggest that a device (e.g., either the SCLP or CP) that includes code executable to map at least a portion of operational specification information for a device onto received aggregate context information to generate relational context information, as recited by claim 37. As discussed further above with claim 1, *Crisman* addresses how one device (e.g., SCLP) can inform another device (e.g., CP) of changes in its functional capabilities, and does not teach or suggest a device mapping any portion of its operational specification information onto received aggregate context information to generate relational context information.

In view of the above, the combination of *Goffinet* and *Crisman* fails to teach or suggest all elements of claim 37, and therefore the rejection of claim 37 should be withdrawn.

Dependent Claims

In view of the above, Applicant respectfully submits that independent claims 1, 14, 20, 31, and 37 are not obvious under 35 U.S.C. § 103 over *Goffinet* in view of *Crisman*. Further, each of dependent claims 2-13, 15-19, 21-30, 32-36, and 38-47 depend either directly or indirectly from one of independent claims 1, 14, 20, 31, and 37, and thus inherit all limitations of the respective independent claim from which they depend. It is respectfully submitted that dependent claims 2-13, 15-19, 21-30, 32-36, and 38-47 are allowable not only because of their dependency from their respective independent claims for the reasons discussed above, but also in view of their novel claim features (which both narrow the scope

of the particular claims and compel a broader interpretation of the respective base claim from which they depend).

B. Lack of Motivation

The Office Action concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of *Goffinet* to include relational context information stored locally thereto “because devices within a network will know how they relate with other devices within the network and thus will know which services it provides best within the network.” Page 3 of the Office Action. The language of the recited motivation is circular in nature, stating that it is obvious to make the modification because it is obvious to achieve the result. That is, the motivation is tantamount to stating that it is obvious to modify *Goffinet* to have relational context information stored locally to its device so that its devices will have relational context information stored locally thereto. Such language is merely a statement that the *Goffinet* reference can be modified, and does not state any desirability for making the modification. The mere fact that references can be combined or modified does not render the resultant combination or modification obvious unless the prior art also suggests the desirability of the combination or modification. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990), as cited in M.P.E.P. § 2143.01. The stated motivation is certainly not provided in the applied references. Thus, the motivation provided by the Examiner is improper, as the applied references must establish the desirability for making the modification.

Moreover, it would not have been obvious at the time of the invention to a person of ordinary skill in the art to combine the disparate teachings of *Goffinet* and *Crisman* because the two references are each attempting to solve a different problem. *Goffinet* addresses configuring multiple printers from a host computer on a network (*see* col. 1, lines 9-14 of *Goffinet*), while *Crisman* “relates to communicating changes in processing capability between an operating system and a service call logical processor” (*see* col. 1, lines 13-16 of *Crisman*). No motivation has been cited for causing one of ordinary skill in the art to look to the disparate teachings of *Goffinet* and *Crisman* and attempt to combine them in anyway. Further, to the extent that one of ordinary skill in the art would be motivated by these references to combine their respective teachings into a system, no motivation is present for

actually employing the techniques of *Crisman* in the configuration of printers in *Goffinet*. Rather, the techniques of *Crisman* clearly are directed to communicating changes in processing capability between an operating system and a service call logical processor, and thus it would be in this capacity that the techniques of *Crisman* would be implemented within the system of *Goffinet* absent some motivation to employ the techniques in some other way.

Applicant respectfully asserts that motivation to employ the techniques of *Crisman* in the manner suggested by the present Office Action is not found in the applied references, but rather such motivation can only be found when using impermissible hindsight with the benefit of Applicant's disclosure in the present application. Hindsight is almost always perfect. It is insufficient to prove that at the time of the claimed invention, the separate elements of the device were present in the known art. Rather, there must have been some explicit teaching or suggestion in the art to motivate one of even ordinary skill to combine such elements so as to create the same invention. *See Arkie Lures, Inc. v. Gene Larew Tackle, Inc.*, 119 F.3d 953, 957, 43 U.S.P.Q.2d 1294 (Fed. Cir. 1997). Such a teaching or suggestion is absent from the references applied by the Examiner. Thus, the motivation to modify *Goffinet* with the teachings of *Crisman* in the manner provided by the present Office Action is improper, as the motivation must be described in a prior art reference and must detail the benefits of such a modification.

Thus, Applicant respectfully submits that the rejection of claims 1-47 under 35 U.S.C. § 103 over *Goffinet* in view of *Crisman* is improper for these further reasons, and thus the rejections should be withdrawn.



III. Conclusion

In view of the above, Applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-2025, under Order No. 10007421-1 from which the undersigned is authorized to draw.

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Label No. EV 482713032US in an envelope addressed to: M/S Amendment, Commissioner for Patents, Alexandria, VA 22313.

Date of Deposit: July 27, 2005

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